

## Product datasheet for **RG207978**

### TTC21B (NM\_024753) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TTC21B (NM_024753) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TTC21B
Synonyms:	ATD4; FAP60; FLA17; IFT139; IFT139B; JBTS11; Nbla10696; NPHP12; SRTD4; THM1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG207978 representing NM_024753 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGC**C

ATGGACTCGCAGGAATTGAAGACTTTGATTAATTACTATTGTCAAGAGAGATATTTCCATCATGTATTAC  
TGGTTGCCAGTGAAGGAATTAAGAGGTATGGAAGTATCCAGTCTTCAGGTTTTATCATGCCATGCGCAC  
ATTAATGGAAGGTAAACTCAAGAAGCTCTTCGAGAATTTGAGGCTATTAATAAAACAAGATGTATCA  
CTTTGTTCTCTACTTGCCTGATATATGCCATAAAATGAGTCTAATCCAGATAGAGAAGCTATTCTGG  
AATCAGATGCCAGAGTGAAGGAACAACGTAAGGAGCTGGAGAGAAAGCCTTATACCATGCAGGCTTATT  
TTTATGGCACATTGGTCGCCATGATAAAGCAAGGGAATATATTGACAGAATGATCAAAATATCAGATGGT  
AGTAAACAGGGACACGTTTTGAAAGCATGGCTTGATATTACAAGAGGAAAAGAGCCTTACTACTAAAAAG  
CACTGAAGTATTTGAAGAGGGACTCCAAGATGGGAATGATACTTTTGCTCTGCTGGGTAAGGCACAATG  
CCTTGAGATGCGCCAGAATTATTCAGGTGCCCTGGAGACTATGAACCAGATAATCGTGAATTTCCGAGC  
TTCCTTCTGCTTTTGTTAAGAAAATGAAATTACAAGTACTGCTGAGGATTGGGACCAGACAGTTGAGA  
CAGCACAAGGTTGCTGCTCCAAGATAGCCAAAATGTGGAAGCACTGAGAATGCAGGCACTCTACTATGT  
GTGTAGAGAGGGGGATATAGAGAAGGCTCCACCAAGCTGGAAAATTTGGAAAATGCATTGGATGCCATG  
GAACCACAGAATGCTCACTTTTCTATAACATTACACTCGCCTCAGCAGAATTTGGAGCTAGTCAAC  
TTATTTCTCAAAAATTCAAACGTTACTTGAGAGAGCTTTTAGTTTAAACCCTCAGCAATCAGAATTTGC  
TACAGAATTTGGATACCAATGATTTTACAAGGAAGAGTTAAAGAGGCACTGAAGTGGTATAAGACCGCC  
ATGACACTTGATGAGACTAGTGTGTCTGCCCTAGTTGGATTTATCCAATGTCAGTTGATAGAAGGGCAAT  
TACAGGATGCAGATCAGCAGCTAGAATTTTAAATGAAATCCAGCAATCCATTGGAAAATCTGCGGAATT  
AATCTATTTACATGCAGTTCTTGCCATGAAGAAAATAAACGACAAGAAGATTATTAATTTGTTAAAT  
GATGCTCTGGCACTCACTTTTACAATTAGAAGGTTTGCCTCTTGGCATAACAGTATTTTAAAAGCTAA  
ATCCTGATTTCTGTTAGAAATGTTATGGAGTATCTGAGCTTCTGTCCAATGCAGCCTGCAAGTCTGG  
GCAACCTTTTGTCCACTTCTCAGGCGTTGCATCTCAGTCTGGAGACTGTAGTAAGAAGTGTCCAGT



[View online »](#)

CTTCTGCAAACAGTCTTCTAATAGCAAAAGTGAATATTTGTCAGGTGATATTGAAGCAGCTTTCAATA  
 ACCTTCAGCACTGCTTAGAACACAATCCCTCTTATGCTGATGCTCATCTGCTGCTAGCTCAGGTTTACTT  
 GTCTCAAGAAAAAGTCAAATTGTGTTCTCAGTCTCTTGAACCTTTGTCTGAGCTATGATTTTAAGGTGAGA  
 GACTATCCTTTATACCATTTGATAAAAGCTCAGTCACAAAAGAAAATGGGAGAAAATAGCAGACGCAATTA  
 AAACACTGCATATGGCAATGAGTTTACCAGGAATGAAAAGAATTGGAGCTTCCACAAAATCAAAAGACAG  
 AAAAACTGAAGTTGATACAAGCCATCGTTTATCGATCTTCTTGAATTGATAGACGTTCCACCGCTTAAAT  
 GGAGAGCAGCATGAGGCAACCAAAGTTTTACAAGATGCCATCCATGAATTTTCTGGAACATCTGAAGAAG  
 TCGGGTTACCATTGCTAATGCAGACCTTGCTCTAGCCCAAGGAGATATTGAACGGGCTTTAAGCATCCT  
 TCAGAATGTTACAGCCGAACAGCCTTATTTTATAGAGGCCAGAGAAAAAATGGCAGATATTTATCTGAAG  
 CACAGAAAAGATAAAAATGTTATATATCACTTGTGTTTAGAGAAAATTGCTGAAAAGATGGCTAACCCCTCGT  
 CTTTTCTCTCCTTGGTATGCATACATGAATATTCTAGAGCCTGAAGAAGCCATAGTAGCATATGAGCA  
 AGCATTAAATCAGAACCCGAAAGATGGAACATTGGCAAGCAAAAATGGGCAAGCACTTATCAAACTCAT  
 AACTACTCAATGGCAATCACTTACTATGAAGCTGCTCTGAAAAGTGGACAAAAGAATTATCTTTGCTATG  
 ACCTGGCTGAGCTCTTATTAATAATGAAATGGTATGACAAAGCAGAAAAAGTTCTTCAGCATGCTCTGGC  
 TCATGAACCTGTAATGAACTGTCAGCTCTCATGGAGGATGGACGTTGTCAAGTTCTTCTAGCAAAAGTT  
 TATAGTAAAAATGGAAAACTTGGTATGCGATCACTGCATTACAACAGGCTCGAGAATTACAAGCTCGGG  
 TACTAAAACGTGTTTCCAGATGGAACAGCCAGATGCAGTTCTCTGCACAGAAAATTTAGCAGCTGAAATTTG  
 TGCAGAGATTGCAAAACATTCTGTTGCTCAGCGAGACTATGAAAAGCAATTAAGTTTTATAGAGAGGCT  
 CTGGTTCACTGCGAAACAGATAAAGATTATGTTGGAAGTGGCAGGATTACCTGGCACAAGATGACC  
 CTGATTCCTGCCTGCGGCAAGTGTCTCTACTGCTTCCAGAGTGACCAGGATAACGAAGCTGCTACCATGAT  
 GATGGCTGATCTCATGTTTCAAGAAACAAGACTATGAACAAGCAGTGTTCATTTACAGCAGCTTTTAGAA  
 CGTAAGCCAGATAATTATGACATTATCTCGTTTGATTGATCTCCTAAGAAGATGTGAAAACTCGAGG  
 ATGTCCCAAGATTTTTCTCAATGGCTGAGAAACGTAACCTCCAGAGCAAAAATGGAACCAAGGATTTTCA  
 TTGTAAAGGACTGTATCTTTGGTACACTGGAGAACCAAATGATGCCCTTCGACATTTAATAAAGCTCGG  
 AAAGATCGTGACTGGGGCAAAAATGCCCTTTAATAATGATAGAGATCTGTTTGAATCCAGATAATGAAA  
 CTGTTGGAGGTGAAGATTTTGAACCTGGATGGAGACCTGGTAATTCAACTGAGAAGCAAGAATCTGT  
 GCAACTGGCAGTAAGAACAGCAGAAAACTTCTTAAGGAACTAAAACCTCAGACTGTTCCAGGTCACGTA  
 CAGCTTCGCATAATGAAAACTATTGCTTAATGGCTACCAAACAGAAATCTAATGTTGAACAAGCATTAA  
 ATACCTTCACTGAAATAGCAGCATCTGAGAAGGAGCATATCCAGCGCTCTTGGGAATGGCAACGGCTTA  
 TATGATCTTGAACAGACTCCACGAGCCAGAAACAGCTGAAGCGTATTGCGAAAATGAATTGGAATGCT  
 ATTGATGCTGAAGAGTTTGAAGAAGATTGGCTGCTACTTGTGATATTTACATTCATCAGCAAAATATG  
 ACATGGCAGAAGACCTGTTAAAACGGTGCCTGCGTCATAATAGATCTTGTGCAAAAGCTTATGAATATAT  
 GGGATACATTATGAAAAAGAGCAAGCATATACAGATGCTGCCTTGAACCTATGAGATGGCATGGAATAT  
 AGCAATCGGACAAATCCGGCAGTAGGATACAACTGGCATTAAATTACTTAAAAGCAAAAAGATATGTGG  
 ATTCAATTGACATATGTCACCAGGTTCTTGAAGCACATCCAACCTATCCAAAAATCAGAAAAGGATATACT  
 TGATAAGGCCCGTGCCTTTAAGACCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG207978 representing NM\_024753  
 Red=Cloning site Green=Tags(s)

MDSQELKTLINYYCQERYFHVVLLVASEGIKRYGSDPVFRFYHAYGTLMEGKTQEALREFEAIKKNKQDVS  
 LCSLLAL IYAHKMSPNDREAI L ESDARVKEQRKGAGEKALYHAGLFLWHIGRHDKAREYIDRMIKISDG  
 SKQGHV LKAWLDITRGKEPYTKKALKYFEEGLQDGNDFALLGKAQCLEMRQNYSGALETMNQII VNFPS  
 FLPAFVKMKMLQLALQDWDQTVETAQRLL LQDSQNVEALRMQALYYVCREGDIEKASTKLENLGNALDAM  
 EPQNAQLFYINITLAFSRTCGRSQLILQKIQTLLERAFSLNPQQSEFATELGYQMILQGRVKEALKWYKTA  
 MTLDETSVSALVGF IQCQLIEGQLQDADQQL EFLNEIQQSIGKSAELIYLHAVLAMKKNKRQEEVINLLN  
 DVLDFHSQLEGLPLGIQYFEKLNPDFLLEIVMEYLSFCMPQPASPGQPLCPLLRRICISVLETVVRTVPG  
 LLQTVFLIAKVYLSGDIEAAFNNLQHCHLNPSYADAHLLLAQVYLSQEKVKLCSQSLELCLSYDFKVR  
 DYPL YHLIKAQSQKMGIEADAIKTLHMAMSLPGMKRIGASTKSKDRKTEVDTSHRLSIFLELIDVHRLN  
 GEQHEATKVLQDAIHEFSGTSEEVRVTIANADLALAQGDIERALSILQNVTAEQPYFIEAREKMADIYK  
 HRKDKMLYITCFREIAERMANPRSFLLLDAYMNILEPEEAI VAYEQALNQNPKDGTLASKMGKALIKTH  
 NYSMAITYEAAKLTGQKNYLCYDLAELLLK LKWDKAEKVLQHALAHEPVNELSALMEDGRCQVLLAKV  
 YSKMEKLGDAITALQQARELQARVLKRVQMEQPD AVPAQKHLAAEICA EIAKHSVAQRDYEKA IKFYREA  
 LVHCETDNKIMLELARLYLAQDDPDSCLRQCALLLQSDQDNEAATMMADLMFRKQDYEQAVFHLQQLLE  
 RKPNDNYMTLSRLIDLRRCGKLEDVPRFFSMAEKRNSRAKLEPGFYCKGLYLWYTGEPNALRHFNKAR  
 KDRDWGNALYNI EICLNPDNETVGGVEFNLDGDLGNSTEKQESVQLAVRTAEKLLKELKQPQTVQGHV  
 QLRIMENYCLMATKQKSNVEQALNTFTTEIAASEKEHIPALLGMATAYMILKQTPRARNQLKRIAKMNWNA  
 IDAEFEKSWLLADIYIQSAKYDMAEDLLKRCLRHNRSCCKAYEYMGYIMEKEQAYTDAALNYEMAWKY  
 SNRTNPAVG YKLAFNYL KAKRYVDSIDICHQVLEAHPTYPKIRKDILDKARASLRP

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

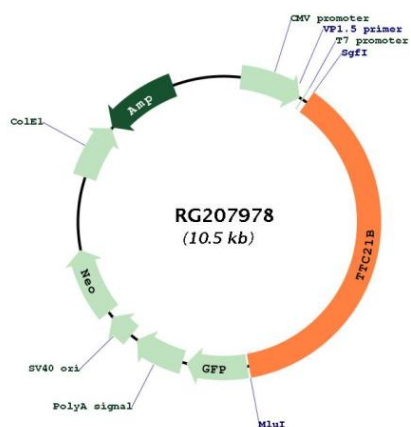


ACCN: NM\_024753

ORF Size: 3948 bp

<b>OTI Disclaimer:</b>	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a></p>
<b>OTI Annotation:</b>	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
<b>Components:</b>	<p>The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).</p>
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_024753.2</a>
<b>RefSeq Size:</b>	4916 bp
<b>RefSeq ORF:</b>	3951 bp
<b>Locus ID:</b>	79809
<b>UniProt ID:</b>	<a href="#">Q7Z4L5</a>
<b>Cytogenetics:</b>	2q24.3
<b>Domains:</b>	TPR
<b>Protein Families:</b>	Protease
<b>Gene Summary:</b>	<p>This gene encodes a member of TTC21 family, containing several tetratricopeptide repeat (TPR) domains. This protein is localized to the cilium axoneme, and may play a role in retrograde intraflagellar transport in cilia. Mutations in this gene are associated with various ciliopathies, nephronophthisis 12, and asphyxiating thoracic dystrophy 4. [provided by RefSeq, Oct 2011]</p>

Product images:



Circular map for RG207978